

What Is Claimed Is:

1. A repair structure for a liquid crystal display having a substrate, comprising:

a scan line on the substrate;

a data line crossing the scan line and having first, second, and third segments, wherein the second segment is an electrically isolated from the first and third segments and located at a portion where the scan line and the data line overlap; and

a repair pattern electrically isolated from the second segment and electrically connecting the first segment with the third segment of the data line.

2. The repair structure according to claim 1, wherein the repair pattern bypasses to pixel electrodes adjacent to the data line and has a portion overlapping the pixel electrodes.

3. The repair structure according to claim 2, wherein a portion of the pixel electrodes overlapped the repair pattern is electrically isolated from other portion of the pixel electrodes.

4. The repair structure according to claim 1, wherein the repair pattern is formed along an upper portion of the data line.

5. The repair structure according to claim 1, further comprising an insulating material formed between the first and second segments of the data line and the second and third segments of the data line.

6. The repair structure according to claim 1, wherein the repair pattern has a "[" shape.

7. The repair structure according to claim 1, wherein the repair pattern has an "I" shape.

8. The method according to claim 1, wherein the repair pattern is formed of metal.

9. A repair structure for a liquid crystal display having a substrate, comprising:
a data line on the substrate;
a scan line crossing the scan line and having first, second, and third segments, wherein the second segment is an electrically isolated from the first and third segments and located at a portion where the scan line and the data line overlap; and
a repair pattern electrically isolated from the second

segment and electrically connecting the first segment with the third segment of the scan line.

10. The repair structure according to claim 9, wherein the repair pattern bypasses to pixel electrodes adjacent to the scan line and has a portion overlapping the pixel electrodes.

11. The repair structure according to claim 10, wherein a portion of the pixel electrodes overlapped the repair pattern is electrically isolated from other portion of the pixel electrodes.

12. The repair structure according to claim 9, wherein the repair pattern is formed along an upper portion of the scan line.

13. The repair structure according to claim 9, further comprising an insulating material formed between the first and second segments of the scan line and the second and third segments of the scan line.

14. The repair structure according to claim 9, wherein the repair pattern has a "[" shape.

15. The repair structure according to claim 9, wherein the repair pattern has an "I" shape.

P. Amt. ~~16.~~ The method according to claim 1, wherein the repair pattern is formed of metal.

17. A method of repairing a liquid crystal display having a plurality of scan lines and data lines which are arranged to cross each other, the method comprising the steps of:

electrically isolating a portion of the data lines that are short circuited with the scan lines where the data line and scan lines are overlapped, thereby forming first, second, and third segments of the data lines, wherein the isolated portion is the second segment;

forming contact holes over each of the first and third segments of the data lines; and

forming a repair pattern electrically connecting the first and third segments of the data lines through the contact holes, wherein the repair pattern is electrically isolated from the scan lines.

18. The method according to claim 17, wherein the step of electrically isolating a portion of the data lines is carried out by a laser.

19. The method according to claim 17, wherein the contact holes are formed by using a laser.

20. The method of claim 17, further comprising the step of forming an insulating material to fill portions between the first and second segments of the data lines and the second and third segments of the data lines.

21. The method of claim 17, wherein the repair pattern is formed by laser induced chemical vapor deposition.

22. A method of repairing a liquid crystal display having a plurality of scan lines and data lines which are arranged to cross each other, the method comprising the steps of:

electrically isolating a portion of the scan lines that are short circuited with the data lines where the data line and scan lines are overlapped, thereby forming first, second, and third segments of the scan lines, wherein the isolated portion is the second segment;

forming contact holes over each of the first and third segments of the scan lines; and

forming a repair pattern electrically connecting the first and third segments of the scan lines through the contact holes, wherein the repair pattern is electrically isolated from the data lines.

23. The method according to claim 22, wherein the step of electrically isolating a portion of the scan lines is carried out by a laser.

24. The method according to claim 22, wherein the contact holes are formed by using a laser.

25. The method of claim 22, further comprising the step of forming an insulating material to fill portions between the first and second segments of the scan lines and the second and third segments of the scan lines.

26. The method of claim 22, wherein the repair pattern is formed by laser induced chemical vapor deposition.